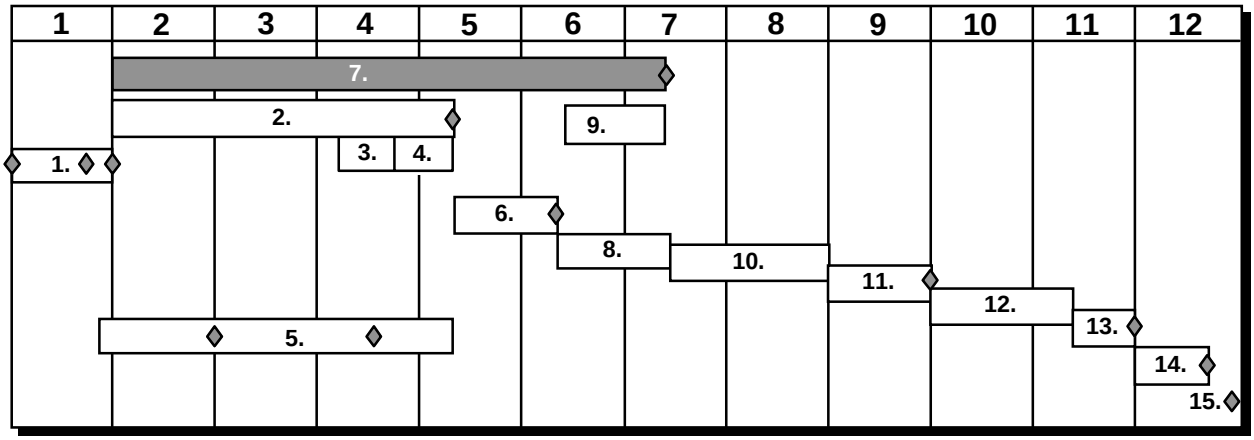
STEP 7: DEVELOP THE MANAGEMENT PLAN

7.1 OVERVIEW



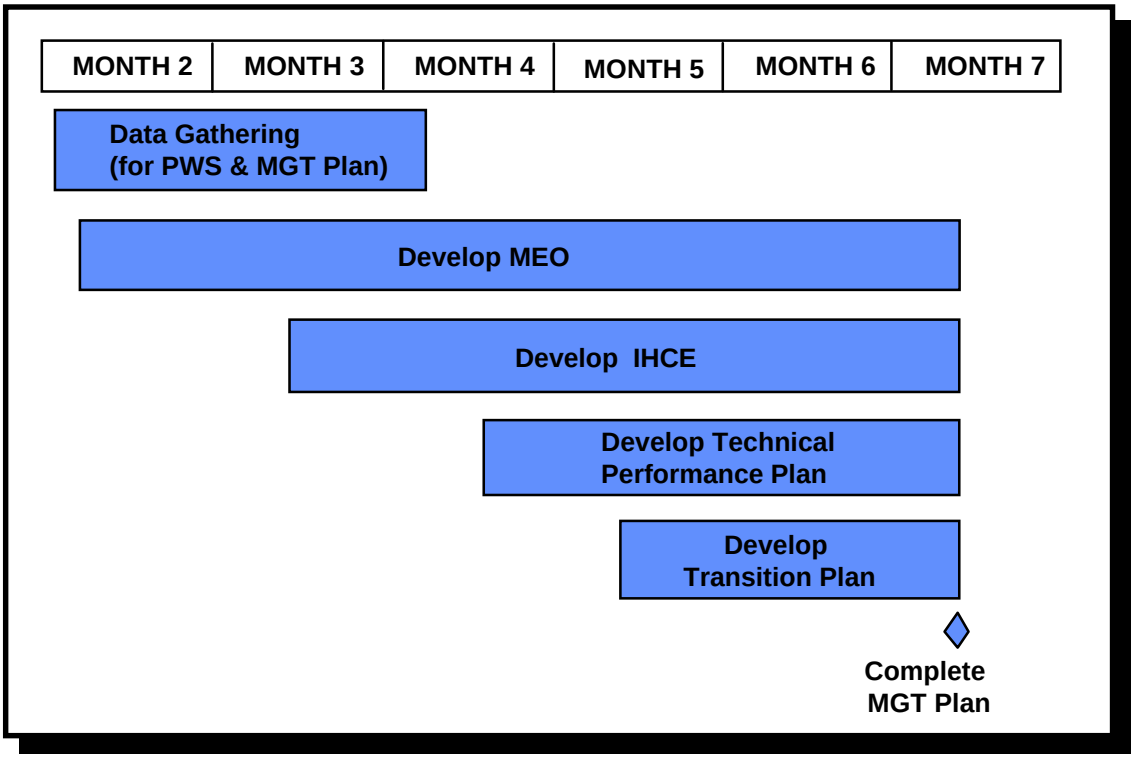
◊ **Major Milestone Event**

The purpose of Step 7 is to develop a Management Plan that consists of the Most Efficient Organization (MEO) document, an In-House Cost Estimate (IHCE), a Technical Performance Plan (TPP), and a Transition Plan (TP). The Management Plan is the in-house organization's "offer" that will be compared to the best value offer submitted by private industry. Step 7 should take approximately 23 weeks to complete.

The development of the Management Plan is an iterative process. The goal in creating the MEO is to develop the best possible organization to perform the work defined in the PWS. The IHCE will be based on the MEO's performance of the PWS and provides the basis for the government's cost for competition. The Technical Performance Plan is the government's proposal for meeting the performance requirements of the PWS and must be based on the MEO. The Transition Plan describes the organization's plan to move from the current organizational structure to the MEO while maintaining performance levels. All of these tasks are interrelated, developed concurrently and, therefore, can begin at any time in Step 7.

The Management Plan must reflect the scope of work defined in the Performance Work Statement (PWS) developed in Step 2 and support the performance requirements included in that document. In developing the Management Plan, the activity under study may consider any prior business case analysis, business process reengineering, or organizational analysis efforts that have been conducted. The completion of the Management Plan concludes the primary involvement of the CA team.

7.2 DESCRIPTION OF KEY TASKS



7.2.1 Gather and Analyze Data

Much of the data required to develop the Management Plan is the same information collected during Step 2 for development of the PWS.

CO Tip: This guide discusses industry staffing standards, work sampling techniques and measures of productivity. This discussion is intended to provide examples and is not an exhaustive discussion of analysis techniques. Each activity should use analysis techniques that are appropriate for the function under study and that are appropriate for developing the MEO.

7.2.1.1 Data Gathering Interviews

Interviewing employees in the activity that is the subject of the CA study can be an effective data gathering technique. During interviews, the CA team should identify any non-routine tasks performed by employees of the activity to ensure that these tasks are included in the workload analysis. The CA team should also identify any future new or additional workload requirements that the activity is planning to undertake. This includes consideration of additional requirements that must be met if the service provider is a contractor selected as a result of the cost comparison. As in the Performance Work Statement, the Management Plan must include activities required to comply with requirements imposed by statute or regulation in the performance of the function under study. Template 7.5.2 presents a Sample Interview Guide.

CO Tip: The CA team should consider applying for waivers, where applicable, of any regulations related to the function under review if it will enable the activity to be performed more efficiently.

Exhibit 7-1 lists data elements that may be used for both the development of the PWS in Step 2 and the development of the Management Plan in Step 7.

Exhibit 7-1
Data Elements

PEOPLE	PROPERTY/EQUIPMENT/ SUPPLIES	FACILITIES DATA
• Organization Chart • Current Staffing • Position Descriptions • Position/Grade • Attendance Records • Special Exempt Data • Training Records • Union/Collective Bargaining Unit • Awards Data	• Maintenance Manuals • Inventory Of Equipment • Inventory Of Material • Survey Of Plant Equipment • Cost Data For Replacement/Upgrade Equipment • Materials Consumed Or Used	• Plant Layout • Installed Equipment • Map Of Installation • Building Maintenance Records • Utility Usage Data • Environmental Impact Studies

OPERATION UNDER STUDY	COMMAND	PRIOR STUDIES
• Operating Procedures - Workflow • Training Manuals • Climate/Weather • Definition Of Workload Measures • Workload Data At The Lowest Functional Level • Measures Of Productivity • Historical Workload • Quality Measurements • Existing Contracts	• All Command Notices And Instructions • Applicable Laws And Regulations For The Function Being Considered	• Business Case Analysis • Prior A-76 Studies • Business Process Reengineering

7.2.1.2 Estimating Workload Requirements

The CA team may find it necessary to estimate workload requirements. Workload estimating techniques that may be used include reviews of historical data and work sampling. The review of historical data begins with determining the data required and identifying appropriate sources of information. Copies of previous reports or studies that specify the volume of work, resource requirements, productivity rates, performance requirements and standards, or performance times should be obtained. This information can be used by the CA team to

define work requirements over a period of time.

In performing work sampling, the laws of probability are applied to forecast the amount of time that will be spent on various tasks. This is accomplished by making random observations of the work conducted over a period of time. This is generally done using random sampling to reduce the level of bias that may be introduced into the work through sampling observations. Observations of current work can be used to determine the proportion of time dedicated to productive versus nonproductive tasks.

7.2.1.3 Analyzing Current Organizational Structure and Processes

During this stage, the CA team documents the organization as it exists at the start of the study. This should include a description of the organizational structure (both formal and informal), the mission and functions, staffing plans, facilities, and equipment. In developing the staffing plan for the existing organization, the CA team must identify all staff assigned to the function. This includes all full-time and part-time government employees, military personnel, and any contractor employees currently participating in the function under study. In addition, all military personnel, both full time and part time, who will participate in the function as part of the Most Efficient Organization must be included in the Management Plan. The cost of labor provided by military personnel is based on the composite rate for uniformed personnel established by DoD or other applicable comptroller.

7.2.2 Develop the Most Efficient Organization

In developing the Management Plan, the CA team must describe the optimum organization, known as the Most Efficient Organization (MEO), to perform the work specified in the PWS. Any improvements in operations, reductions in staffing, improvements in facility layout or equipment utilization, or any other ideas designed to improve performance are documented in the MEO.

Many techniques are available to the CA team in developing the MEO. The CA team should focus on innovative and creative approaches to performing the function; however, the MEO must be an organization that can be implemented by the government. In developing the MEO, the CA team may use business process reengineering principles, activity-based costing, business case analysis techniques, or organizational analysis. Because of the time constraints imposed by the A-76 time-line, the CA team may use some of the foregoing techniques in conjunction with simulation models. Creating a simulation of the MEO may help the CA team visualize the impact of changes recommended in the MEO. Template 7.5.1 provides a sample outline of an MEO document and a sample MEO appears at the end of Step 7. Template 7.5.3 presents a format for the MEO Staffing Recommendations.

The following are examples of information that may be used to develop the MEO:

- Organizational chart—new organizational structure required to support the MEO
- New work breakdown structure
- New workflow design

- New position descriptions and grade structures
- New performance measures
- New facilities layout and productivity enhancing equipment
- Recommended revisions or amendments to existing contracts
- Estimates of materials and supplies needed during the performance period.

7.2.2.1 Mock Reduction In Force

After the MEO is developed, the Human Resources Officer (HRO) may conduct a mock reduction in force (RIF). The purpose of the mock RIF is to help with the transition plan under both scenarios. The mock RIF assists in estimating the costs of relocation and training affected personnel and minimizing adverse impacts on employees by planning for how to place or assist them. If the Government loses the bid, the information will be useful in planning for the reductions of the entire in-house organization. If the Government wins the bid and has to implement the MEO, the information can be utilized in implementing the reductions of the affected personnel.

CO Tip: The mock RIF creates highly sensitive information that should be restricted to a very limited distribution.

7.2.3 Develop the In-House Cost Estimate

The IHCE is the part of the Management Plan that details the cost of the MEO's performance of the requirements in the PWS. The IHCE can be prepared based on the following factors:

- Personnel Costs
- Material and Supply Costs
- Other Specifically Attributable costs
  - Depreciation
  - Cost of Capital
  - Rent
  - Maintenance and Repair
  - Utilities
  - Insurance
  - Travel
  - MEO subcontracts
  - Other Costs
- Overhead Costs
- Additional Costs.

Template 7.5.4 provides an example of an In-House Cost Estimate using the Cost Comparison Form (CCF) format. A sample IHCE based on the simulation appears at the end of Step 7.

The A-76 *Supplemental Handbook* states that an activity will not be converted to contract on the basis of a cost comparison unless a minimum cost differential is met. The minimum cost differential is the lesser of 10 percent of in-house personnel related costs (Line 1 on the CCF) or $10 million over the period of performance.

The Air Force Management Engineering Agency has developed the OMB Circular A-76 Cost Comparison System called COMPARE which is an automated system for developing the In-House Cost Estimate. This system is available through the OSO and may be used to prepare the IHCE.

7.2.4 Develop the Technical Performance Plan

The Technical Performance Plan (TPP) describes how the MEO will perform the work requirements of the PWS. The TPP must be responsive to the requirements of the PWS. The TPP specifies how the performance requirements will be met, measures of performance, staffing by functional area, staffing utilization, facilities

utilization, and it describes how changes in the workload will be addressed in the new organization. An outline of a Technical Performance Plan is provided in Template 7.5.5. A sample Technical Performance Plan is included at the end of Step 7.

7.2.5 Develop the Transition Plan

The Transition Plan describes how the current organization will make the changes necessary to implement the MEO. The Transition Plan should account for two possible outcomes: the transition to the MEO, if the government wins, and the plan to transition to contract performance, if the contractor wins. An outline of a Transition Plan is provided in Section 7.5.6. A sample Transition Plan is included at the end of Step 7.

7.2.6 Prepare for Independent Review of the Management Plan

The completed PWS, QASP and Management Plan, along with supporting documentation, are forwarded to the Independent Review Officer (IRO). The IRO acts as an independent authority to certify (refer to Step 9) that data contained in the Management Plan reasonably establishes the government's ability to perform the PWS within the resources provided by the MEO, and that all costs entered on the CCF are fully justified and calculated in accordance with the procedures described in Part II of the A-76 *Supplemental Handbook*. The IRO provides this certification in writing on the CCF. Typically, the IRO is outside the Command under study at least one or two levels above.

To prepare for the independent review, the CA team should complete the Pre-Independent Review Checklist shown in Template 7.5.7 and prepare a letter scheduling the independent review.

7.2.7 Develop MEO Quality Control Procedures

When services are performed by the MEO as a result of a cost comparison, a formal review and inspection of the MEO should be conducted. Typically, this review should be conducted following the end of the first full year of performance. The Post-MEO Performance Review confirms that the MEO has been implemented in accordance with the Transition Plan, establishes the MEO's ability to perform services of the PWS, and confirms that actual costs are within the estimates contained in the in-house cost estimate. Adjustments may be made for formal mission or scope of work changes. The A-76 *Supplemental Handbook* states that Post-MEO Performance Reviews will be conducted on not less than 20 percent of the functions performed by the government as a result of the cost comparison. As a result of the Post-MEO Performance Review, if it is determined that the government has failed to implement the MEO as provided in the Transition Plan or that the MEO is not meeting the minimum performance standards, the contracting officer will award a contract to the best-value contractor who participated in the cost comparison. If award to the best-value contractor is not feasible, the contracting officer will immediately resolicit to conduct a revised and updated cost comparison.

Quality control and quality assurance are two components used to monitor the quality of the work performed by the MEO throughout the performance period and to prepare for the Post-MEO Performance Review. The MEO develops and implements a quality control process to

ensure that quality standards are met. Government Quality Assurance Evaluators (QAE) develop quality assurance procedures to ensure that the MEO is following its quality control process and meeting the requirements of the QASP.

Template 7.5.8 provides a list of issues to be considered in developing the MEO quality control process and in preparing for the Post-MEO Performance Review. A sample description of an MEO quality control process is included at the end of Step 7.

7.3 ROLES AND RESPONSIBILITIES

Key Players

- **Commanding Officer**

  The Commanding Officer should remain involved in the tasks that occur in this step and participate in resolving any critical issues that might arise. The Commanding Officer should continue to motivate staff and provide guidance and leadership in the development of the Management Plan. The Commanding Officer ensures that this step is completed as scheduled in Step 1. Finally, the Commanding Officer needs to be sensitive to the anxiety of personnel being studied and address their concerns to the extent possible.

CO Tip: The Commanding Officer also has final approval authority for the Management Plan, which consists of the MEO document, In-House Cost Estimate, Technical Performance Plan, and Transition Plan. This includes certifying the MEO before the IRO's review.

- **Senior Management**

  Senior managers should keep informed about the impact of the A-76 study on the function and support the CA team's development of the Management Plan to the extent required. This may include providing information about activities and providing people to support the A-76 study. Senior management may also assist the CA team in developing new operating procedures that cross organizational boundaries.

- **Functional Manager**

  Functional managers should support the CA team's development of the Management Plan as needed. This support may include making personnel available for interviews as requested by the CA team. Functional managers should ensure that data collected by the CA team presents an accurate and complete description of the function under study. If the CA team encounters problems collecting data, the functional managers should help resolve these problems. Ultimately, the functional manager is the largest stakeholder in this process and must be actively involved in the key business decisions that will affect performance regardless of whether the function ultimately is performed by the MEO or by a contractor.

- **CA Team Leader/CA Team**

  The CA team Leader is responsible for developing the Management Plan on schedule and delivering it to the contracting officer. He or she should provide periodic updates to the Commanding Officer on the status of the A-76 study. Serious impediments to the timely completion of the Management Plan should be discussed with the Commanding Officer along with recommendations for resolving these problems. Careful coordination with persons who provide data in support of the Management Plan development will also contribute to the timely completion of the plan. Also, discussions with peers

of CA team members who have conducted similar CA Studies may facilitate the development of the Management Plan.

- **Comptroller**

  The comptroller provides required cost data to the CA team. The comptroller begins planning for the reallocation of funds that may be required depending on whether the MEO or a contractor performs the function as a result of the cost comparison process.

- **Human Resources Officer**

  The Human Resources Officer (HRO) provides the CA team with position descriptions for affected employees in the current organization and proposed position descriptions for the MEO. The HRO conducts the mock RIF and provides information to the CA team in support of developing the Management Plan.

- **Union(s)**

  Union(s) may assist the A-76 study by informing union members affected by the study about the A-76 study process, their rights to appeal the outcome of the cost comparison process and their possible rights of future employment with a contractor if a contractor is selected to perform the function as a result of the cost comparison process.

- **Outsourcing Support Office**

  The OSO is available to provide advice, assistance and support to the Commanding Officer and the CA team to the extent required. Outside assistance may serve as the CA team, or supplement the team as may be necessary given the Commanding Officer's existing resources and available expertise.

Advisory Players

- **One Level Up Review**

  The reviewing authority one level above the activity involved in the A-76 study should provide overall guidance and direction to the Commanding Officer. In addition, they should provide oversight to the process of developing the MEO.

- **Legal Counsel**

  Legal counsel provides advice to the Commanding Officer and CA team on how to conduct the A-76 study in accordance with applicable statutes and regulations.

7.4 CHECKLISTS FOR KEY PLAYERS

- **Commanding Officer**

1. Ensure that the Management Plan is developed on schedule
2. Meet with CA team to monitor progress and resolve appropriate issues
3. Periodically report progress of A-76 study to the command sponsor
4. Meet with senior management and affected employees to share information
5. Facilitate data gathering and ensure cooperation of employees with CA team
6. Review and comment on draft deliverables
7. Approve final deliverables of Step 7.

- **Senior Managers**

1. Meet with Commanding Officer and functional managers as required
2. Communicate with liaison and command sponsors
3. Assist CA team in developing the Management Plan as required.

- **Functional Managers**

1. Meet with Commanding Officer and other senior managers as required
2. Meet with subordinates to provide information on A-76 study status
3. Assign subordinates as required to support the A-76 study
4. Safeguard future employment rights of affected employees who may be interested in working for a contractor if a contract is eventually awarded
5. Communicate with liaison and command sponsors
6. Assist CA team in developing the Management Plan as required.

- **Human Resources Officer**

1. Conduct mock RIF
2. Provide position descriptions for current organization and MEO.

- **Comptroller**

Provide cost data and budgetary support to CA team as required.

- **CA Team Leader**

1. Prepare Management Plan and supporting documentation.
2. Adjust assumptions as required.
3. Meet with Commanding Officer to provide progress reports and to resolve any key issues.
4. Meet with functional manager to receive input in support of Management Plan development.
5. Meet with CA team to discuss A-76 study progress and resolve key issues.
6. Ensure continued focus of CA team on satisfying data collection requirements.
7. Collect data.
8. Analyze data.
9. Estimate workload and performance for contract period.
10. Develop MEO.
11. Develop In-House Cost Estimate.
12. Develop Technical Performance Plan.
13. Develop Transition Plan.
14. Complete the independent review preparation checklist.
15. Prepare a letter scheduling the independent review.
16. Ensure that any waivers requested or granted are brought to the attention of the Contracting Officer.

7.5 TASK TEMPLATES

This subsection provides the Commanding Officer, CA team, and team leader with templates to guide them in developing the Management Plan. The team should tailor these templates as required to ensure the development of the best possible Management Plan. The following templates are included in this section:

7.5.1 Most Efficient Organization Outline
7.5.2 Interview Guide
7.5.3 MEO Staffing Recommendations
7.5.4 In-House Cost Estimate (Cost Comparison Form)
7.5.5 Technical Performance Plan Outline
7.5.6 Transition Plan Outline
7.5.7 Pre-Independent Review Checklist
7.5.8 Post-MEO QA Plan

7.5.1 Most Efficient Organization Outline

The primary deliverable in Step 7 is the development of the Most Efficient Organization. This document describes the new organization and represents the government's best effort at creating the most efficient and cost effective organization possible to perform the work specified in the PWS. The more cost competitive the MEO is, the better the chances are for the in-house organization to win the competition with the

private sector. An outline of what the MEO document should like is provided below.

Template 7.5.1: Most Efficient Organization Outline

Executive Summary
- Objective
- Approach
- Assumptions

I. Introduction
- Purpose of the study
- Description of the function under review—specify the boundaries of the study
- Description of the methodology/approach

II. Current Operations
- Organization Mission Statement
- Organization and Staffing — describe the specific tasks that are being performed, how many FTEs are authorized to perform the task, and how many are actually required to perform the task
- Operating procedures
- Workload data
- Equipment analysis
- Facility analysis
- Materials analysis

III. Analysis of Current Operations
- Analysis of mission and recommendations for changes
- Organization — discuss the current organization and its ability to perform the mission and identify areas for improvement
- Operating procedures
- Workload analysis — discuss the current workload and areas of known future requirements
- Staffing analysis
- Evaluation of position classifications and grades
- Residual organization

IV. Recommendations
- A. Define the methodology and assumptions used to develop the Most Efficient Organization
- B. Describe recommendations that can be implemented to improve the organization's operational efficiency
- C. Discuss whether levels of responsibility are allocated properly in the organization
- D. Identify technology, training, restructuring issues, materials, and

equipment considerations that would improve the command's ability to perform the work defined in the Performance Work Statement

E. Provide supporting rationale for all recommendations

V. Developing the MEO

Analysis of Resource Impact — quantify the impact of the Management Plan recommendations on the current organization.

Funding — quantify personnel savings, new equipment costs, total savings to the government from implementing the MEO

Personnel — quantify the difference between the current organization and the Most Efficient Organization (see Staffing Recommendations in Template 7.5.3)

Equipment and Facilities — quantify costs and anticipated savings associated with recommendations

VI. Define the In-House Quality Control Process

Define the method by which the government will ensure quality

Discuss any variations from the QASP (e.g., what steps in the QASP will be eliminated or added if the result of competition is in-house performance)

Identify specific tasks the government must implement to ensure internal quality assurance

Post-MEO Performance Review

7.5.2 SAMPLE INTERVIEW GUIDE

Before the data gathering stage can begin, the CA team must meet and agree to a particular interview guide format. This will help ensure consistency in interviewing. The CA team should establish a timeline for collecting workload data, which includes time to conduct interviews, gather available data, and analyze workload data. Given that workload data may not always be readily available or may not be available in the required format, the CA team should agree to an approach for estimating workload data when necessary. The method for estimating data should be described and an audit trail should be provided in the Management Plan.

NOTE: Much of the data gathering and analysis should be done in conjunction with any data gathering occurring during Step 2, development of the PWS. The workload data gathered for the PWS will be used in the Management Plan.

Template 7.5.2: Sample Interview Guide

Name of Interviewer _____Name of Interviewee _____

Date of Interview _____

Organization of Interviewee _____

Job Classification of Interviewee _____

How long have you been in this position? _____

Who is your immediate supervisor? _____

Do you supervise any employees? _____ How Many? _____

Describe the nature of your work_____

_____

What are the inputs to this activity? (i.e., activity starts with a work request)

_____

Describe the work process and procedures _____

How does the process end? (i.e , completed work request forwarded to manager)

_____

How much or many of these activities do you do each day, week, month, year?_____

_____

Is there any seasonal variation to the work? _____

_____

What government regulations dictate why certain functions are performed? Can any of these functions be eliminated? _____

For the tasks that work well, why do you think they work? What could be done to to improve those areas that don't work well? _____

The focus of questions during this stage should highlight areas of the organization that can be improved upon in the development of the MEO. _____

7.5.3 MEO Staffing Recommendations

This template presents a format for the recommended staffing plan of the Most Efficient Organization. It is a proposed format for documenting the current personnel costs and comparing those costs to the personnel costs in the proposed Most Efficient Organization.

Template 7.5.3: Staffing Recommendations

POSITION TITLE	GRADE	AUTHORIZED FTE'S	ASSIGNED FTE'S	PROPOSED FTE'S
Transportation Director	WS-14	0.5	0.5	0.5
Secretary	GS-5	1	1	1
Head Administration Branch	GS-11	1	1	0
		AUTHORIZED FTE'S	ASSIGNED	PROPOSED

POSITION TITLE	GRADE		FTE'S	FTE'S
Records Clerk	GS-5	1	1	1
PM Scheduler	GS-7	1	1	1
Service Writer	GS-9	1	1	1
Service Writer	GS-7	1	1	1
Head Maintenance Branch	WS-13	1	1	1
Parts Expediter	WG-9	1	1	0
Inventory/Supply Spec.	WG-7	0	0	1
Mechanic	WG-10	11	10	4
Mechanic	WG-9	6	5	3
Mechanic	WG-7	3	3	4
Mechanic	WG-5	1	1	3
Head Body & Paint Branch	WS-12	1	1	0
Body Specialists	WG-9	5	4	3
Painter	WG-9	1	1	1
TOTAL		**36.5**	**33.5**	**25.5**

7.5.4 In-House Cost Estimate Form

Template 7.5.4 represents page one of the two page generic cost comparison form (see Step 14 for the full cost comparison form). It illustrates the In-House Performance, the Contractor or ISSA Performance and the Decision sections of the cost comparison. It is designed to cover the performance period of the contract. In this template, the first three years of the performance period are covered along with a column for additional performance periods and a column for total cost. Depending on the actual period of performance, there may be a column for each of five or more years of performance and a column for total costs.

Template 7.5.4: Cost Comparison Form In-House Vs. Contract Or ISSA Performance

	Performance Periods				
	1st	**2nd**	**3rd**	**Add'l**	**Total**
IN-HOUSE PERFORMANCE					
1. Personnel					
2. Material and Supply					
3. Other Specifically Attributable					
4. Overhead					
5. Additional					
6. Total In-House Cost	_____	_____	_____	_____	_____

Template 7.5.4 (cont'd)

CONTRACT OR ISSA PERFORMANCE					
7. Contract/ISSA Price					
8. Contract Administration					
9. Additional					
10. One Time Conversion					
11. Gain on Assets	( )	( )	( )	( )	( )
12. Federal Income Taxes	( )	( )	( )	( )	( )
13. Total Contract or ISSA	_____	_____	_____	_____	_____
DECISION					
14. Minimum Conversion Differential					
15. Adjusted Cost of In-House Performance					_____
16. Adjusted Total Cost of Contract or ISSA Performance					_____
17. Decision - Line 16 minus Line 15					_____
18. Cost Comparison Decision: Accomplish Work:					_____
In-House					_____
Contract or ISSA					_____

The following tables show how data for the preceding Cost Comparison Form are calculated. This first table is included in order to illustrate how personnel costs (Line 1) are derived. It is important to note that this illustration is simplified and does not include all of the details that are necessary and normally included such as: geographic pay; applicable entitlements; fringe benefits; temporary employee treatment of fringe benefits versus social security; or an explanation of the method used to escalate pay in the out-years. Methods of calculating these costs and details about them are not included in this guide but may be found in other handbooks, regulations, instructions and procedures associated with the A-76 process (see the A-76 *Supplemental Handbook*).

Line 1: Personnel Costs (Based on the MEO Staffing Plan)

A	B	C	D	E	F	G	H	I
Position Title	Grade	FTEs**	Annual Wage (C * Wage Rate)	Other Entitle-ments	Basic Pay (D+E)	Fringe Benefits*** (F*32.45%)	Other Pay	Personnel Costs (F + G + H)
Director	WS-14	0.5	$24,825		$24,825	$8,056		$32,880
Secretary	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Records Clerk	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Scheduler	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Service Writer	GS-9	1.0	$34,121		$34,121	$11,072		$45,193
Service Writer	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Head Maint. Branch	WS-13	1.0	$47,486		$47,486	$15,409	$200	$63,096
Inventory/Supply Specialist	WG-7	1.0	$29,390		$29,390	$9,537	$200	$39,128
Mechanic	WL-10	2.0	$72,426		$72,426	$23,502	$400	$96,328
Mechanic	WG-10	2.0	$65,811		$65,811	$21,356	$1,070	$88,237
Mechanic	WG-9	3.0	$95,285		$95,285	$30,920	$400	$126,605
Mechanic	WG-7	4.0	$117,562		$117,562	$38,149	$1,813	$157,523
Mechanic	WG-5	3.0	$80,808		$80,808	$26,222	$2,790	$109,820
Body Specialist	WG-9	3.0	$95,285		$95,285	$30,920	$400	$126,605
Painter	WG-9	1.0	$31,762	$5000	$36,762	$11,929	$200	$48,891
TOTALS		25.5	$795,580	$5,000	$800,580	$259,788	$7,473	$1,067,842

** or hours for intermittent employees
*** or 7.65% for intermittent employees

Line 1 personnel costs include the cost of personnel staffing identified in the Most Efficient Organization. In accordance with the A-76 *Supplemental Handbook*, the cost of military personnel must be included in the IHCE and is calculated using the composite rate for uniformed personnel established by the DoD or the Navy Comptroller.

Material and supply costs are calculated for each period of contract performance. Material costs are calculated only if the materials are used by the activity and will not be provided to the contractor or ISSA service provider by the government. In the following example, it has been determined that the NSA Cattle Crossing will use the special paint that is in the current inventory.

Line 2: Material and Supply Costs

ITEM	ID #	QUANTITY	UNIT PRICE**	SOURCE OF SUPPLY	MATERIAL MARKUP FACTOR***	ADJUSTED UNIT PRICE (D*E*G)	ANNUAL MATERIAL COST (C*H)
Special Paint	Bldg. 16	1	$4,278	GSA	25%	5,347	5,347
Total		1	$4,278		25%	5,347	5,347
** for out years, this figure would include an adjustment for inflation							
*** According to the A-76 *Supplemental Handbook*, no material mark up is required if the Navy certifies that all costs of acquiring, managing, storing, transporting and overhead are included in the pricing structure. For the purposes of this illustration, a material mark up factor has been included in order to provide an example of a circumstance where the Navy would not furnish a particular material item and costs would need to be included.							

Line 3: Other Specifically Attributable Costs

Other specifically attributable costs will be used to document any costs other than personnel and materiel costs that are specifically attributable to a function for each year of the period of performance.

CATEGORY	FIRST	SECOND	THIRD	TOTAL
Depreciation				
Rent	$75,000	$78,000	$80,000	$233,000
Maintenance & Repair				
Utilities	$27,000	$25,000	$25,000	$77,000
Insurance				
Travel				
Other Costs				
Total	**$102,000**	**$103,000**	**$105,000**	**$310,000**

Line 4: Overhead

Overhead costs include two major categories of costs: operations overhead and general and administrative overhead. Operations overhead is defined as those costs that are not 100 percent attributable to the function under study, but they are costs that are generally associated with the recurring management of the activity. The general and administrative overhead costs include items such as salaries, equipment, space related to headquarters management, accounting, data processing, and other support services provided in support of this activity. Line 4 is calculated by multiplying the Line 1 personnel costs by 12 percent. If the personnel costs include the cost of military personnel, the overhead cost should be 12 percent of the civilian personnel costs only.

Line 5: Additional Costs

This line is used to identify any costs not specifically attributed to lines 1 to 4 of the IHCE. Additional costs may include the cost of capital for new equipment, the costs of any support contracts included in the MEO (e.g., if the MEO includes a new support contract in order to be more efficient), and the cost of contract administration for any MEO related support contracts (although these contract administration costs would be included in Line 1, Personnel Costs).

7.5.5 Technical Performance Plan

This template presents a suggested format for the technical performance plan (TPP). The TPP describes the government's approach to implementing the technical aspects of the PWS using the MEO. The CA team can use this format in developing the TPP to perform the work specified in the Performance Work Statement.

Template 7.5.5: Technical Performance Plan -- Outline

A. Introduction

B. Understanding of the Scope of Work

C. Technical Approach

1. **Approach**
2. **MEO Staffing and Organization**
3. **Training**
4. **Equipment and Facilities**

D. Management Approach

E. Past Experience/Statement of Qualifications

7.5.6 Transition Plan

The Transition Plan should cover two contingencies: activities performed by the transition team if the government wins the bid, and activities performed by the transition team should the contract be awarded to an outside vendor. For the first contingency, the Transition Plan should discuss those specific steps taken by the command to implement the MEO as described in the Management Plan. This includes plans to acquire new resources, establish new position descriptions, reclassify positions, or implement new operating procedures. If the contract is awarded to an outside vendor, the Transition Plan should include plans for helping government employees transfer to new jobs, disposition of government equipment and materials not used by the contractor, and plans for coordination with the contractor for a smooth transition from government to contractor operations.

Template 7.5.6: Transition Plan Outline

I. Introduction — Specify the time-frame the Transition Plan will address, who (organization and point of contact) is responsible for implementing the plan, affected organizations, and list assumptions and references used in developing the plan. Note that all sections in this outline, except Section V.B., deal solely with the government's transition to the MEO, while Section V.B addresses a transition to contractor operations.

Summary of Process Changes — discuss changes in process and procedure between the current organization and proposed MEO.

Summary of Staffing Changes—discuss changes in staffing and organization between the current organization and proposed MEO. Include discussion of training in the new organization.

Planning for Implementing the Most Efficient Organization — describe all the planning which must occur before the award decision is made.

Post-Award Decision Activities — implementation of planning process depending on who wins the award.

A. Government Wins
B. Contract Awarded to an Outside Vendor

VI. **Indicators of Successful Transition to the MEO —** describe the performance indicators that will define the successful implementation of the Transition Plan

7.5.7 Pre-Independent Review Checklist

The A-76 *Supplemental Handbook* requires that the government's cost estimate be certified by the command's independent review officer (IRO) to ensure that the estimate complies with the guidelines specified in the Circular. The Management Plan including the MEO, IHCE, TPP and TP must be forwarded to the IRO for review. The IRO acts as an independent authority to certify that the Management Plan reasonably establishes the government's ability to perform the PWS with the resources defined in the MEO. The IRO also ensures that the government's cost estimate has been calculated in compliance with the A-76 *Supplemental Handbook.*

The following checklist should be completed before forwarding the Management Plan to the IRO. A list of personnel involved in the development of the Management Plan and Cost Estimate should be made available to the IRO. The IRO can upon these personnel for clarification of any information in the documents being reviewed. This list could also include the names and telephone numbers of individuals who participated in advisory roles during the study (e.g., individuals from legal, procurement, and personnel).

Template 7.5.7 Independent Review Checklist

1. Has the Management Plan been completed and approved by the Commanding Officer?
2. Has the Management Plan been developed to address the same scope of work as defined in the PWS?
3. Identify the authorized spaces for the function and the positions identified in the MEO.
4. Verify that the cost comparison was developed using the same scope of work, period of performance, and performance standards established in the PWS.
5. Is all documentation available to support the development of the Management Plan workload data and development of the MEO?
6. Is all documentation available to support the in-house cost estimate?

7.5.8 Post-MEO Performance Review

A Post-MEO Performance Review is required for 20 percent of the cases by the A-76 Circular when performance of a function is to remain in-house as a result of the cost comparison. The Post-MEO Performance Review should be performed as a formal review to analyze the government's performance one year after implementation of the MEO.

The Post-MEO QA Plan should be based on the Quality Assurance Surveillance Plan developed in Step 2, Develop the Performance Work Statement and Quality Assurance Surveillance Plan. This will provide the details of the government's quality assurance plan when it is implementing the MEO. Use the checklist below to prepare for a Post-MEO Performance Review.

Template 7.5.8: Post-MEO Performance Review

1. Confirm that the MEO has been implemented in accordance with the Transition Plan

2. Confirm that the activity is performing the services listed in the Performance Work Statement

3. Validate that the actual costs are within the estimates established in the IHCE.

4. If adjustments to the MEO or cost estimate have been made, ensure that the proper waivers or modifications to the scope of work have been obtained by the activity.
5. Measure implementation of the MEO: Has the organization implemented the personnel structure described in the Management Plan? Do the numbers of FTEs, the grade structure, and contract support match items listed in the Transition Plan and MEO?
6. Measure the performance of the MEO in terms of workload, responsiveness, quality of the service/product.
7. Review actual costs versus costs projected in the IHCE for all line items (personnel, materials and supplies, other specifically attributable costs) to determine conformance with the cost estimate.

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Simulated Management Plan
(provided for illustrative purposes only)

The following Management Plan including a sample interview guide, MEO, In-House Cost Estimate, Technical Performance Plan, and Transition Plan and were developed during the course of a simulation to test this guidebook. These examples are for illustrative purposes only.

SAMPLE INTERVIEW GUIDE:

Name of Interviewer: S. Canada
Name of Interviewee: J. Mechanic
Date of Interview: 10/16/96
Organization of Interviewee: Transportation Maintenance and Repair
Job Classification of Interviewee: WS-13, Head Maintenance Branch
How long have you been in this position: 20 years
Do you supervise any employees: 21
Describe the nature of your work: Maintain and repair all 1,424 vehicles on NSA
What are the inputs to this activity?

Process starts with a work order from the administration branch, and a vehicle from the customer. Receive a service ticket from the service writer that details the problem with the vehicle. A copy of the ticket is given to the scheduler and the records clerk. The Maintenance Branch does not begin work on any vehicle before receiving a service order and a schedule from the Administration Branch. Maintenance Branch will do scheduled and unscheduled repairs at the same time.

Describe the work process and procedures:

a. The Maintenance Branch is responsible for both scheduled and unscheduled maintenance and repair.

1. Scheduled maintenance includes: change/rotate tires, check fluids, replace wiper blade and air filters, change oil, winterize, perform tune-ups based on the mileage of the vehicles or time from last service.

2. Unscheduled repairs: include both vehicle breakdowns and vehicle accidents. This is accomplished by troubleshooting the vehicle to determine the cause of failure. Remove part and give it to the parts expediter who gets a new part. If the vehicle has additional trouble that was not listed on the service ticket, the additional parts and trouble are noted on the service order.

b. Also responsible for picking up and towing cars that break down within a 100 mile radius, requires sending out a tow truck and a couple of employees to tow the vehicle back to the repair shop.

c. Responsible for the maintenance of the fire and police vehicles. Includes installing radios and custom fitting all police vehicles on the base. Any maintenance on the police or fire vehicles is a high priority. All appropriate resources are assigned to fixing those vehicles until the work is complete.

d. Supplies: Common parts are located in the vehicle repair shop. Parts that are not in the shop are obtained from Base Supply. If Base Supply does not have the part in stock, it purchases the part from a local distributor.

e. Vehicles that have been in accidents: The service writer tries to determine if repairs other than body work and paint are required. We coordinate with the body shop to repair these vehicles; however, they affect schedules and planning in the maintenance shop.

f. A local contractor disposes of oil, tires, and batteries. All disposal has to be done in accordance with OSHA standards.

g. Process ends when the road test is satisfactorily completed, the paperwork is completed, and vehicle is made available to the customer.

Special Requirements:

a. The three bridge cranes require special weight testing. Travel to the bridge crane site is required to make repairs. More than one person is required to work on cranes because of the heights. This work needs to be planned and scheduled ahead of time.

b. Maintenance of the fire trucks must adhere to all safety, fire, and environmental standards. In Administration Branch, the Records Clerk must maintain the appropriate forms indicating that the maintenance has been performed in accordance with the regulations. This has to be done quickly to keep the trucks in service.

Workload:

Obtain copies of any reports that are reported to the command on a monthly and quarterly basis that report on the Vehicle Maintenance Activity.

Are there any seasonal variations to the work performed?

a. The Body Shop performs more body repair work in the winter. The battery shop is busier in the winter recharging or replacing batteries. Snowplows and associated hydraulics need to be serviced in the winter to keep them operating. This work generates overtime hours in the winter.

Government Regulations:

- OSHA guidelines (required by law)
- NAVFAC Standard Navy Maintenance Schedule (get a waiver)
- Other NAVFAC regulations
- Local Regulations—A tanker explosion 10 years ago was the result of using old loading equipment. Base regulations require a 3-hour process to purge the tanker and piping when repairing the tankers. No longer needs to be done since only nonflammable fluids are used.

What processes work well in the organization?

a. Routine maintenance works well because we can plan for the parts and the labor.

What processes don't work well in the organization?

a. Getting the unscheduled maintenance done. Parts that are not in the storeroom are always long lead time items.

b. We are behind in technology. There's no training for my staff, the equipment in the shop is not up to date, and it takes us longer than the standards to repair the vehicles.

c. Problems with the scheduling process: Can't get the customers to bring in vehicles for preventive maintenance. When they do bring the vehicles in to the shop, we have a lot of unscheduled repairs and the PM sometimes gets backed up. Any unscheduled repairs for the police or fire vehicles take precedence over any other maintenance work and disrupt the schedule.

What could be improved:

Problems with the interaction between the Administration Branch and the Body Shops. Procedures would work better if we consolidated those operations under the Maintenance Branch. Also, the scheduler needs to be under my branch in Maintenance.

SAMPLE MOST EFFICIENT ORGANIZATION (MEO)

EXECUTIVE SUMMARY

The objective of the MEO is to develop the most efficient organization for the Transportation Maintenance and Repair Division. The approach is based on the PWS, interviews with staff, analysis of workload, and when required, estimates of workload data and industry best practices. It is assumed the division works 8 a.m. to 5 p.m. Monday through Friday. It is also assumed that the current workload continues and no major changes are planned in the customer base. Based on the best available data and analysis, it was concluded that 26 FTEs, vice the current 37 FTEs, can deliver the services of the MEO. To facilitate the new level of effort in the assigned work, moderate changes in the organization and overlapping of shifts to extend service availability and work assignments are required. In addition, some technical capabilities will be added.

INTRODUCTION

The MEO will portray the division as it needs to be — more efficient, but satisfying all customer requirements. The MEO was developed using the best available data on workload, staffing, work processes and procedures, outputs, as well as the facility and organizational structure. Assumptions and estimates were used where necessary to simplify the analytical problem and to work around unavailable data.

In order to establish an appropriate benchmark for the division's productivity, commonly based standards such as Chilton's and Motors were consulted. These documents were used to benchmark the process.

The scope of the study addressed all vehicles assigned to the NSA. Workload and customer base were straight-lined over the performance period. In other words, work loads were maintained at the same level. The motor pool operations associated with the Transportation Department were excluded from the scope.

The methodology included interviews with selected managers and staff in the division, review of the maintenance and repair records, budgets, and procedures. Where workload data was absent, work sampling was used to develop estimates. Customers were interviewed regarding their experience with the division and the level of satisfaction; however, no formal customer survey was conducted. To gauge and consider new ways of doing business, commercial best practices and standards were consulted from trade sources.

CURRENT OPERATIONS

The division provides vehicle maintenance and repair for the 1,424 vehicles plus 3 bridge cranes owned by the Naval Support Activity (NSA). The Maintenance Branch performs both scheduled and unscheduled maintenance and repair. In addition, the branch provides emergency repair for any transient vehicles on NSA. The body shop is

responsible for painting, body work and other work such as upholstery, windows, and the chassis.

Exhibit 7-2 shows the distribution of employees within the Transportation Division. At the time of the study, 36.5 FTEs were authorized and 33.5 FTEs were assigned to perform the functions of the division. Sixteen different positions spanning 10 job series are included.

Exhibit 7-2
Staffing Chart for the Current Organization

POSITION TITLE	GRADE	AUTHORIZED FTES	ASSIGNED FTES
Transportation Director	WS-14	0.5	0.5
Secretary	GS-5	1.0	1.0
Head Administration Branch	GS-11	1.0	1.0
Records Clerk	GS-5	1.0	1.0
PM Scheduler	GS-7	1.0	1.0
Service Writer	GS-9	1.0	1.0
Service Writer	GS-7	1.0	1.0
Head Maintenance. Branch	WS-13	1.0	1.0
Parts Expediter	WG-9	1.0	1.0
Mechanic	WG-10	11.0	10.0
Mechanic	WG-9	6.0	5.0
Mechanic	WG-7	3.0	3.0
Mechanic	WG-5	1.0	1.0
Head Body & Paint Branch	WS-12	1.0	1.0
Body Specialists	WG-9	5.0	4.0
Painter	WG-9	1.0	1.0
TOTAL		36.5	33.5

Current Operating Procedures

The service writer develops a work order based on the customer's comments. There is no diagnostic information provided on the work order by the service writer. The Maintenance Branch head then reviews the work order and estimates the time required to perform the tasks. The work order is then routed to the scheduler. The scheduler then develops the schedule of work to be done and routes the work order to the Maintenance Branch and the body shop.

Scheduled maintenance includes changing tires; rotating tires; checking fluids; replacing wiper blades; changing air filters, oil and oil filters; winterizing; and performing tune-ups and other routine maintenance based on the mileage or time of last service. Unscheduled repairs include breakdowns and accidents.
The division also tows cars that break down within a 100-mile radius.

The division's work also includes maintaining 6 fire trucks and 105 police vehicles. This includes installing radios and custom fitting all police vehicles on the base. Any maintenance on the police or fire vehicles is a high priority that preempts all other repairs until complete.

The Maintenance Branch repairs engines, electrical systems, and any related electrical equipment. The body specialists have been assigned to perform towing.

The body shop schedule is driven primarily by accidents and periodic repainting. All vehicles are repainted as needed. The body shop coordinates with the Maintenance Branch on any repairs required following accidents. Any body work done to the exterior of the vehicle is done by the body shop.

The Administrative Branch retains all hard copy records, logs all work orders, and initially defines the problem with the vehicle. The branch tracks all work received in the division and provides reports on operations. The branch maintains the maintenance records for all vehicles at NSA. The branch also develops the schedule for all scheduled maintenance and unscheduled work. It also provides reimbursable repair work for small commands, and coordinates with the comptroller to provide completed work orders for billing and accounting.

The branch has a manual vehicle record maintenance system. Scheduling is done on a large white board. (*For purposes of the simulation, the simulation team assumed that the activity did not use the Base Engineering Support Technical (BEST) system or any other automated fleet maintenance system.*)

The front office secretary schedules all directors' meetings, and maintains all time and attendance records for this branch.

The division director ensures effective and efficient operations aimed at satisfying the customer. The director coordinates all activity with the command.

Workload Data

Exhibit 7-3
Historical Workload Data

AUTOMOBILE AND TRUCK MAINTENANCE/REPAIR (ALL DATA IN THIS TABLE IS ESTIMATED)		
FUNCTION	HISTORICAL NUMBER OF OCCURRENCES	
	1995	1996
Major Repair	552	450
Transient Equipment Repairs	252	348
General Repair		
Repairs generated from PM inspections	3,600	3,552
Repairs generated from PM maintenance	3,540	3,480
Repairs generated from field service	390	372
Repairs generated from service calls	114	132
Repairs generated from new vehicle service	12	18
Accident Repair (including labor/materials)		
– greater than $5,000	12	6
– $2001 to $5,000	60	48
– $500 to $2,000	72	36
– under $500	18	24
Service calls		
– during regular hours	1,200	1,170
– after regular hours	150	114
Road service	210	192
Tow truck service	114	96
New Vehicle Service	48	72
Specific Maintenance. & Repair Requirements		
- body and fender repairs (including associated painting & marking)	186	144
– corrosion prevention	372	354
– battery maintenance	480	432
– tire replacement	1,440	1,200
– tire repairs	222	264
– glass replacement	372	528
– glass repairs	204	126
– key services	198	144
– transfer/installation of special equipment	72	42
– painting and marking (not associated with body and fender work)	30	24
– special inspections (tests and calibrations)	138	192

Exhibit 7-3 (continued)

WEIGHT HANDLING EQUIPMENT (WHE -- 3 BRIDGE CRANES)		
FUNCTION	HISTORICAL NUMBER OF OCCURRENCES	
	1995	1996
Major repair	12	7
Minor repair	150	91
Preventive maintenance	72	84
Scheduled inspections and tests	72	84

Equipment Analysis

Test equipment is old and cannot perform diagnostics on modern fuel injected vehicles. One of the bays has a dangerous lift that cannot be used. This increases the time required to conduct maintenance.

The shop uses a compressed air cart instead of a centralized air system. This requires the mechanic to locate and move the cart before starting any job requiring compressed air.

The current procedures require the mechanic to rig the vehicle and then tow the vehicle back to the shop.

The Administration Branch has access to computer systems; however, the hardware is outdated and subject to frequent system crashes. As a result, the clerk and scheduler have created and rely heavily on a manual system for creating and tracking work orders. The system is labor intensive and requires that multiple paper copies of the work order be generated for distribution to the Maintenance Branch, the Body and Paint Branch, and the scheduler. The study team observed several instances where work stopped while personnel searched for a specific work order.

All hand tools are kept in a central storage closet. To obtain tools, the mechanics must locate the tool room manager to unlock the storage area. The parts expediter (WG-9) has the collateral duty of serving as tool room manager. When the manager of the tool room is involved in a task, he either stops work and unlocks the room, or gives the mechanic the keys to the room. While the process for obtaining tools at the start of a task required going to the locked storage room, the emphasis on returning the tools to the room was not stressed heavily. Inventory of tools is incomplete and it is difficult to track the exact amount of equipment in the facility. Approximately $15,000 in hand tools have been lost over the past 3 years.

Facility Analysis

The shop is a 1940's era warehouse. Batteries are recharged in the battery shop, which is an isolated area with ventilation. The tire rotating area is caged to prevent debris

from tires from dispersing during inflation. Lighting is insufficient and there are problems with the electrical configuration. The shop is hard to keep clean and the layout is inefficient.

Materials Analysis

Some shop level inventory is loose around the warehouse. The division personnel tend to stockpile parts at their workbench due to delays in getting parts from supply. Paint cans are stored in the paint/body shop. A list of materials and supplies used over the past year is included as an attachment.

ANALYSIS OF CURRENT OPERATIONS

Analysis of Mission

With constant demand for vehicle maintenance services, there is no need to alter the mission of the division. The mission is to provide high quality maintenance and repair to all NSA vehicles in a timely fashion.

Organization

The division has 36.5 authorized positions, of which 33.5 are filled. The staff are all motivated, dedicated individuals who perform tasks to the best of their ability. There is a lack of training in current operations and technique. In addition, with some change, the division can be more productive and effective.

- Service writers need to be trained to improve the details of the problem on the work order and to include estimated time of repair.
- Scheduler looks at availability of the shop, the workload, and parts inventory (scheduled PM).
- Currently, no one is looking up the flat rate standards for each task by referring to Chilton's or Motor's.
- The expediter needs to be a supply technician to better expedite parts.
- The Maintenance Shop does not coordinate with the Body Shop.
- The Maintenance and Body Shop Branches both seem over-staffed for the amount of workload.
    - Ð The Battery Shop is staffed by one WG-10 and one WG-7 Mechanic.
    - Ð WG-10/9s use the WG-7/5s only as parts runners and assistants.
- The head of the Administration Branch has limited promotion opportunities in the division.

Operating Procedures

Current operating hours are 8 a.m. to 5 p.m., Monday through Friday. There are no provisions for early drop-off or late pickup of vehicles left for maintenance.

Currently, the work orders are distributed by the head of the Maintenance Branch as they arrive in the shop but without consideration for the complexity of the actual repair.

The in-shop supply system is ineffective in that there is no system in place to track current inventory and generate reorders. Also, there is no Basic Purchasing Agreement (BPA) in place to order supplies from a local vendor, such as Pep Boys or Trak Auto, when the parts are not available in a timely manner through Navy Supply System. No automated system is currently connected with the base supply that would expedite identification of requirements.

Off-site towing of vehicles is disruptive to the schedule. This function can be assigned to a lower skilled person. The procedure for sending out an individual to tow a vehicle back to the shop is very random. Generally, whoever is standing around is tasked with going out and towing the vehicle. In several instances, the team observed two mechanics going out to retrieve a vehicle. This process has generated overtime hours because calls for tow usually come in late in the afternoon.

The inability to control the arrival of vehicles for scheduled maintenance hampers the division's ability to schedule work. PM is scheduled in advance based on time since last PM and/or mileage driven. However, the record keeping functions are highly paper intensive and not very accurate. As a result, some false PM notices are generated to customers. Getting the vehicles into the department to PM is difficult because the users do not want to give up the vehicle and do not always believe the PM notice. Letting PM slip has created some additional vehicle maintenance problems. However, to offset slipping of PM, the branch combines scheduled and unscheduled maintenance as follows:

1. Vehicle comes in for scheduled maintenance and in the process the mechanic identifies some unscheduled maintenance needs. The mechanic will perform the maintenance.

2. Vehicle comes in for unscheduled maintenance and the mechanic performs scheduled maintenance.

Only ad hoc PM is conducted on the branch shop equipment and it's based on the PM card that was supplied with the equipment. This creates shop equipment downtime, which disrupts the schedule.
The system of using compressed air carts versus a centralized compressed air system presents some inefficiencies in the maintenance operations. When conducting work sampling, the study team noted that a great deal of time is lost locating and transporting the compressed air carts around the shop. This time is represented as indirectly productive in the work sampling exhibits.

Workload Analysis

For this simulation, the CA team used three workload analysis methods to evaluate the performance of the hypothetical maintenance and repair operation at NSA, Cattle Crossing, Utah. The first method was a form of work sampling, the second method was a type of productivity analysis, and the third applied an industry staffing standard. These three methods, briefly described below, are intended to illustrate the types of analyses that a CA team might conduct. These are only three examples and are not intended to be an all-inclusive approach to determining the MEO staffing plan. In a real A-76 study, the CA team would perform much more comprehensive analyses of the workload and performance of the activity under study.

Work sampling is a method of observing a work environment and recording the productive, indirectly productive, and nonproductive time of the workforce being studied. Exhibit 7-4, Work Sampling Method Body and Paint Branch, represents a work sampling analysis of the Body and Paint Branch. The CA team observed the work of the Body and Paint Branch for 1 month and summarized the hours in each category. The Body and Paint Branch spent 43 percent of its time in productive work. An additional 17 percent of staff time was spent in indirectly productive work, such as equipment setup, tool and parts staging, and cleanup. According to the analysis, 40 percent of the time is spent in nonproductive work. Based on this analysis, the CA team concluded that the staffing of the Body and Paint Branch could be reduced by 40 percent.

Exhibit 7-4
Work Sampling Method—Body and Paint Branch

HOURS OF OPERATION	PRODUCTIVE HOURS	INDIRECTLY PRODUCTIVE HOURS	NON-PRODUCTIVE HOURS
0800-0900	22.4	16.28	51.74
0900-1000	61.2	26.64	31.84
1000-1100	64	20.72	39.8
1100-1200	38.4	19.24	43.78
1300-1400	52	20.72	31.74
1400-1500	68.4	0	33.68
1500-1600	35.2	20.72	55.72
1600-1700	38.4	23.68	59.7
Total	**380**	**148**	**348**
Percentage	**43%**	**17%**	**40%**

Productivity analysis is a method of comparing the actual hours spent performing specific tasks to industrial engineered standards for these same tasks. Industrial engineered standards have been developed for most vehicle maintenance tasks over a period of many years. These “flat rate standards” are tested, revised and distributed regularly in Chilton’s, Motor’s, and other similar publications. Exhibit 7-5, Productivity Analysis Method Maintenance Branch, illustrates this type of analysis for the

Maintenance Branch. The CA team evaluated all of the shop repair orders (SRO) (10,134) worked in 1995. (If this universe is too large to evaluate, a statistically valid sample of SROs could be selected). For each SRO in the universe (or sample), each specific task and hours actually spent performing the task are recorded. Then each task is looked up in the flat rate standards. These two factors, actual versus flat rate, are compared. In this analysis, the CA team found that the Maintenance Branch could be reduced by 30 percent if all of the maintenance tasks were performed at the flat rate standards.

Exhibit 7-5
Productivity Analysis Method Maintenance Branch

TYPE	#/HOURS
Total Shop Repair Orders	10,134
Actual Hours to Repair	40,536
Flat Rate Hours to Repair (Chilton's)	28,374
Flat Rate to Actual Hours	12,162
Percent of Change	30%

The purpose of these and other similar analyses is to identify the targets of opportunity for improving productivity, reducing costs and reducing FTEs. It is important for the CA team to perform appropriate analyses and draw reasonable conclusions. Assumptions used in the analyses should be explicit. A detailed audit trail from the authorized staffing to the on-board staffing to the recommended staffing should be clearly identified.

The third method used in the simulation was the industry staffing standards approach. In this method, an industry staffing standard of 2.4 repair hours/1,000 miles of operation was identified. Taking the 10,142,450 miles of operation for the fleet equates to 14 FTEs for maintenance and repair functions. This calculation is derived from the fact that the total miles of operation for the fleet in a year divided by the standard provides the total maintenance hours for the year. ((10,142,450/1000)*2.4=24,342 hours of maintenance). This amount is then divided by the productive hours in a year (24,342/1,776) to identify the 14 FTEs.

Exhibit 7-6
Industry Staffing Standards Method—Maintenance Branch

TYPE	INVENTORY	AVG MILES/YEAR	AGGREGATE VEHICLE MILEAGE
Sedan	91	4,750	432,250
Sedan/Police	105	21,000	2,205,000
1/2 T p/u	644	6,100	3,928,400
3/4 T p/u	329	6,300	2,072,700
3/4 T p/u 4X4	40	9,350	374,000
2 T stake	176	4,500	792,000
1500g tanker	21	7,500	157,500
Wrecker	12	14,000	168,000
Fire truck	6	2,100	12,600
Total	1,424		10,142,450

Staffing Analysis

The Maintenance Branch is not using industry standards to develop the amount of time required for repairs. Nor is actual time for repairs compared with industry standards. The CA team's productivity analysis, which applied the industry staffing standards, suggests that 30 percent of the FTEs can be reduced based on industry standards.

For the maintenance branch, 79 percent of the mechanics are WG-10/9's. For the Body and Paint Branch, 100 percent of the staff are WG-9's. Both the Maintenance Branch and the Body and Paint Branch are top heavy in grade structure.

The complexity of all of the repairs done in the Maintenance Branch does not necessarily require the skills of 17 WG-10/9 mechanics. The overall skill mix of the Maintenance Branch may require fewer WG-10/9 mechanics and more WG-7/5 mechanics. These WG-10/9 mechanics may be teamed with less experienced mechanics (WG-7/5). The WG-10/9 mechanics should divide the shop repair orders into tasks that are completed at the appropriate skill level.

One of the WG-10 mechanics maintains the battery shop and 13 electric carts. A battery charge is started every night on each cart and runs overnight. Starting a battery charge does not require a WG-10 mechanic skill level. A lower skilled person could be responsible for the maintenance of all fleet batteries.

The workload of the body shop does not justify a WS-12 supervisory position. Based on the work sampling analysis, which showed 40 percent nonproductive time, the staffing in the Body and Paint Branch was reduced to 4 FTEs.

The Administrative Branch is over staffed for the current workload. Installing an automated system for scheduling and tracking maintenance and repairs, in addition to

cross-training mechanics in doing service write-ups and scheduling, will eliminate the need for the records clerk, PM scheduler, and one service writer.

Evaluation of Position Classifications and Grades

The wage grade position descriptions (PD's) are based on the Office of Personnel Management (OPM) guidelines, and the positions have been classified by the Human Resources Officer (HRO). Recommendations for staffing the MEO have been approved and PD's have been rewritten as required. The PD's for the body specialist positions have been modified to incorporate the painting function in these tasks. The head of the Maintenance Branch position has been reclassified as a working leader in the MEO.

RECOMMENDATIONS

This section presents recommendations that will position the division to be more efficient and bring it into line with the MEO. Recommended changes are grouped under the headings of staffing and organization, training, equipment and facilities, and procedures.

Staffing and Organization

Based on the workload analysis, the assumption that workload will not change, and the use of widely accepted commercial staffing standards, the division can perform its work well with 25.5 FTEs vs. the current 36.5 FTEs. Exhibit 7-7 provides a comparison of the two staffing levels, distributed by position.

Exhibit 7-7
Comparison of Staffing Levels

POSITION TITLE	GRADE	AUTHORIZED FTES	ASSIGNED FTES	PROPOSED FTES
Transportation Director	WS-14	0.5	0.5	0.5
Secretary	GS-5	1	1	1
Head Administration Branch	GS-11	1	1	0
Records Clerk	GS-5	1	1	1
PM Scheduler	GS-7	1	1	1
Service Writer	GS-9	1	1	1
Service Writer	GS-7	1	1	1
Head Maintenance. Branch	WS-13	1	1	1
Parts Expediter	WG-9	1	1	0
Inventory/Supply Spec.	WG-7	0	0	1
Mechanic	WG-10	11	10	4
Mechanic	WG-9	6	5	3
Mechanic	WG-7	3	3	4
Mechanic	WG-5	1	1	3
Head Body & Paint Branch	WS-12	1	1	0
Body Specialists	WG-9	5	4	3
Painter	WG-9	1	1	1
TOTAL		36.5	33.5	25.5

The number of mechanics can be reduced to 14 from the current 21 FTEs. This staffing plan also allows for the special, more labor-intensive needs of other vehicles and equipment maintained, such as the fire trucks and bridge cranes, as well as the need to allow for absences due to leave and training. The projected workload in the Body and Paint Branch does not justify a separate branch. The staffing has been adjusted to reflect 40 percent nonproductive time identified in the workload analysis and, therefore, reflects 4 FTEs versus 7 FTEs.

With fewer maintenance and repair positions, a designated WG-10 lead mechanic will review all SRO's from the service writers and distribute work to more junior mechanics. The WG-9/10 mechanics will complete more complex tasks and as opportunities arise, provide on-the-job training to the WG-7 and WG-5 employees.

To address supply concerns, the current parts expediter job will be reclassified as an inventory/supply specialist. With better automation of the inventory function and training, this position will be better equipped to obtain parts and material and promote economical management of these inputs.

The current organizational structure provides three separate branches to support very similar functions. The branches can be consolidated from three to one because the functions are closely aligned. As a result, two supervisory positions can be eliminated.

The head of the Maintenance Branch will direct maintenance and repair operations of all types, including administrative requirements.

In the branch consolidation, the Administrative Branch positions become part of the Maintenance Branch, eliminating the head of the Administrative Branch slot. Automation of records (see below) will enable this consolidation. To every extent, the Maintenance Branch chief fulfills the role in the MEO of a working leader. This WS-13 position is responsible for the day-to-day operations of the branch.

The three body specialists and the painter will be assigned work by the head of the Maintenance Branch and may work under the supervision of one of the WG-10 mechanics.

In this simulation, the CNO's announcement was for Transportation Maintenance and Repair at Naval Support Activity, Cattle Crossing, Utah. During Step 1, Plan for Commercial Activity Study, the CA team carefully evaluated the business unit definition. One of the most important issues considered was whether Transportation Operations should be included in the business unit definition, the packaging of the function. Some members of the CA team advocated including the operations function in the study even though this function was not announced. This repackaging makes sense for several reasons including a more logical business unit that includes both operations and maintenance, cleaner definition of the Transportation Director (WS-14) and his two Secretaries (GS-5), and a better, more accountable business unit in the event a contractor wins the competition. Other members of the CA team advocated not including the operations function in the business unit definition. For one thing, the operations function was not part of the CNO announcement. Consequently, obtaining the authority to included it in the study could significantly delay the process and jeopardize the 12 month time-line. Another issue was the impact on the affected employees. In other words, why include positions and people (the team's associates) in the study when it is not required? Other considerations included the Supply Department, Accounting, and Human Resource Office and the extent of their support to the Transportation Maintenance and Repair function. While some of the time of these related functions are in support of the function under study, the fence must be drawn somewhere. After discussing these issues with the Commanding Officer, the decision was made to follow the CNO announcement and not include the operations function or these other support functions in the study of Transportation Maintenance and Repair.

The Transportation Director (WS-14) is responsible for administration of the Transportation Maintenance Branch and the Transportation Operations Branch. Approximately 50 percent of the director's time is spent administering each branch. The director also interfaces with the rest of the organizations at the Naval Support Activity, Cattle Crossing, Utah. There are two Secretaries (GS-5) one supporting maintenance and the other supporting operations. Since the business unit was defined to exclude the operations function, 50 percent of the Directors time and 100 percent of the Secretary that supports the maintenance function are included in the study. (This

example is used in the simulation to illustrate how to cost out the personnel when the business unit is defined in this way.)

Training

In creating a smaller, more efficient organization, some positions assume additional functions and require training or cross-training.

The service writer will need to be trained in records management and in the new records management system being purchased (see below).

Mechanics will need to be trained on the use of the new compressor system and diagnostic tool being acquired.

The inventory/supply specialist will need skills upgrading and training on a new inventory management system being purchased.

The WG-5's require training in towing.

The scheduler (GS-7) will need training in using the scheduling module of the new automated maintenance system. As an alternate, a mechanic or service writer will be cross trained to use the scheduling module.

Equipment and Facilities

The activity will acquire an automated maintenance system with several components, including a scheduling module (with a look-up for standard performance times; such as Chilton's), an inventory system, a preventive maintenance log and scheduler for each vehicle, and a vehicle repair history.

The activity will acquire a modern diagnostic system that addresses major vehicle systems.

To ease the physical problems and productivity loss caused by the current compressor carts, a central system will be installed. It will deliver compressed air to each workstation, either from the floor or from overhead pipes.

To enhance mechanic productivity and reduce tool losses, roll-away tool cabinets will be purchased. One cabinet with tool set will be assigned to each mechanic. This practice promotes accountability and convenience.

Procedures

For complex vehicle problems, mechanics will be organized as cross-functional teams to diagnose and repair the vehicle. These cross-functional teams will also serve as training opportunities for less experienced mechanics. For routine repairs and

maintenance, individual mechanics will complete the work based on best industrial practices.

Shop repair orders will be put in the work queue in terms of priority to enable the most efficient and responsive view of staff.

One of the problems identified in conducting scheduled maintenance on vehicles was getting drivers to bring their vehicles in for maintenance. Extending the hours of operation of the shop by staggering the arrival and departure times of the mechanics will provide an incentive to the customers to bring vehicles to the Maintenance Branch for scheduled maintenance.

DEVELOPING THE MOST EFFICIENT ORGANIZATION

For the direct workload, the industry staffing standards, productivity analyses, and work sampling methods were used to determine the FTEs required for the core workload. Additional staff were determined to be required for the complexity of the work assigned to the organization, such as the requirements of the major equipment overhauls, police cars, crane maintenance, fire equipment and special police car electronic equipment.

An assumption was made that the workload would remain level over the period of performance.

The three analyses explained above justify 14 mechanic positions. Maintenance requirements were broken into four categories of specialized equipment plus routine maintenance, as shown below. These 14 mechanics will also be responsible for the maintenance of this specialized equipment and maintaining the priority repairs of the safety equipment.

- Fire trucks
- Police vehicles and electronic equipment
- Bridge cranes
- Electronic functions and electric carts
- Routine maintenance and repair of all other vehicles

In staffing the Paint and Body Branch functions, the team used the results of the work sampling observations to establish the 40 percent reduction in staffing. See Exhibit 7-4 above for the results of work sampling.

Consolidating the Administrative Branch into the Maintenance Branch eliminates the need for the head of the Administration Branch.

Analysis of Resource Impact

Exhibit 7-7, Comparison of Current Staffing Levels (above) displays the organization's current staffing structure along with the recommended staffing level for the MEO.

Funding. The Current and MEO Staffing Plans, contained in the In-House Cost Estimate below, show the personnel costs associated with both the current organization and the MEO organization. Implementation of the MEO staffing will result in a 30.14 percent savings in FTEs and a cost savings of $385,349 or 26.52 percent of personnel costs.

Training. Training will be required for the implementation of the MEO. These costs are noted in the In House Cost Estimate, at a total of $167,500

Equipment and Facilities. The equipment purchases recommended will cost the division $104,750. This initial expenditure includes the cost of computer equipment, the centralized air compressor, tool cabinets, and diagnostic equipment.

IN-HOUSE QUALITY CONTROL PROCESS

Two elements ensure quality in the maintenance and repair process. The first element is quality control, which entails the MEO developing and implementing a process that ensures that work is done correctly the first time. The second element is quality assurance, which involves those procedures that will ensure that the MEO is following the established quality control process and that the process works. The quality control element is developed and implemented by the MEO, while the quality assurance element is the responsibility of the Quality Assurance Evaluator (QAE) based on the QASP developed for this activity.

If the government is selected to be the service provider as a result of the cost comparison, it must implement a quality control process. The purpose of this quality control process is to ensure that the work performed by the MEO meets all of the requirements specified in the PWS. The basic approach involves several steps:

- Each mechanic, body specialist, and painter will be certified to perform certain maintenance and repair operations. Each of these positions will require ASE certification.
- Each mechanic or team (depending on how the work is assigned) will take ownership for the repairs required for each vehicle. Consequently, while the repairs for each vehicle are being performed, the mechanic or team will certify that its repairs are completed correctly. This process is similar to the artisan certification process used elsewhere in the Navy.

By using industry standards, the MEO's quality control process will focus on meeting the performance standards stated in the PWS, rather than focus on product inspections. The QAE's quality assurance function will be to evaluate the process in place in the division by spot checking the services provided.

Specific Performance Measures

The MEO will use three performance measures, based on the PWS, as a test of the quality control system. These are the availability of vehicles, level of customer satisfaction, and the condition of the vehicles.

Availability of vehicles. 82.5 percent of vehicles will be available at all times. Available means that the vehicle is operable and available for customer use. Certain vehicles and equipment will take priority in workload scheduling. Such vehicles will be designated by NSA and include emergency vehicles, fire trucks, police vehicles, and cranes. The MEO will ensure that 1,175 out of 1,424 vehicles will be available for use at all times (82.5 percent of fleet).

Customer satisfaction. The MEO will conduct a survey on contract award to form a baseline. During the first year, customer satisfaction will be equal to or better than the baseline. In subsequent years, customer satisfaction will be measured against industry standards.

Condition of vehicles. Vehicles will be maintained in acceptable operating condition, normal fair wear and tear excepted. Fair wear and tear means the reasonable amount of deterioration that occurs during the normal use and operation of a particular vehicle. The MEO will follow the manufacturer's recommendations for scheduled maintenance.

MEO Quality Control Procedures

If the MEO is the successful offeror, the QASP developed by the CA team in Step 2 will apply. As a result of the post-MEO review, if it is determined that the MEO is not fully implemented, not meeting performance measures identified in the PWS, or not keeping costs within the established estimate, a contract will be awarded to the best offeror.

SAMPLE TECHNICAL PERFORMANCE PLAN

INTRODUCTION

This Technical Performance Plan (proposal) represents the MEO's bid on the vehicle repair and maintenance function at NSA, Cattle Crossing, Utah. The MEO represents the government's new approach to performing the functions outlined below. This new approach emphasizes increased efficiency by adopting industry standards, using performance measures and improved customer satisfaction, and lowering costs of operations.

UNDERSTANDING OF THE SCOPE OF WORK

This work involves providing the managerial, administrative, supervisory, direct, and overhead personnel to accomplish all of the maintenance and repair functions, including paint and body work. These services will be provided for 1,424 vehicles assigned to the NSA, Cattle Crossing, Utah, and transient equipment within a 125-mile radius of the facility. The MEO will provide equipment, repair parts, materials, supplies, and tools to perform the full transportation maintenance and repair function.

Primary indicators of performance will be availability of vehicles (versus vehicle downtime) and customer satisfaction. The standard of performance for vehicle availability is 82.5 percent (17.5 percent vehicle downtime). Vehicle downtime means the time during which a vehicle is out of service while undergoing maintenance or repair, or awaiting parts. The standard of performance for customer satisfaction will be based initially on the results of the baseline survey conducted immediately after award. In subsequent years, customer satisfaction will be measured against industry standards. Additionally, overall vehicle condition will be the third criterion on which performance is measured. Vehicle condition will be maintained according to fair wear and tear standards used in private industry.

Exhibit 7-8 illustrates the inventory on which this Technical Performance Plan (proposal) is based.

Exhibit 7-8
Inventory Data

TYPE	INVENTORY	AVERAGE MILES/YEAR	AGGREGATE VEHICLE MILEAGE
sedan	91	4,750	432,250
sedan/police	105	21,000	2,205,000
1/2 T p/u	644	6,100	3,928,400
3/4 T p/u	329	6,300	2,072,700
3/4 T p/u 4X4	40	9,350	374,000
2 T stake	176	4,500	792,000
1500g tanker	21	7,500	157,500
wrecker	12	14,000	168,000
fire truck	6	2,100	12,600
Total	1,424		10,142,450

TECHNICAL APPROACH

Although the organization that currently performs this function for NSA, Cattle Crossing, Utah, is offering this proposal, the organization envisions an entirely different approach to performing the function. The MEO, which is the proposed organization to perform this function, has been developed based on industry standards and commercial practices. Consideration has been given to changing requirements and reducing staffing along with the potential efficiencies that result from organization realignments.

Approach

The automated vehicle maintenance system is critical to the efficient operation of the MEO. It improves the efficiency of maintenance and repair scheduling, management of the material inventory, and performance of the maintenance and repair activities. This improved efficiency results in quicker turnaround time for maintenance and repair, increased vehicle availability and a smaller, more efficient work force.

As the customer brings a vehicle in for maintenance or repair, the service writer, who is familiar with the operation, enters the maintenance or repair requirements into the system for appropriate scheduling. This process includes a preliminary search of the shop's material inventory for availability of parts and a determination of time required for the maintenance or repair based on flat rate standards. After the service writers make a preliminary determination of the work to be performed and the time required to perform the work on a shop repair order (SRO), the WG-10 lead mechanics will review the SRO. These SROs originate from the service writers, who enter the SROs into the computer system. The scheduler and the lead mechanics then assign the SROs to the appropriate individuals or team to perform the work based on availability and skills. The WG-9/10 mechanics will complete more complex tasks and as opportunities arise, provide on-the-job training to the WG-7 and WG-5 employees.

After the individual or team assigned to the vehicle diagnoses the problem, the inventory/supply specialist will check the MEO inventory of parts (shop inventory). If not available in the shop inventory, the supply specialist will query the Navy Supply System. If not available in the Navy Supply System, or not available within a reasonable amount of time, the parts may then be purchased from a local vendor. A single loaner vehicle for short-term customer use will be available for special circumstances. Police and fire vehicles will have the highest priority in scheduling for maintenance and repairs.

For road service, a WG-5/7 mechanic will drive the wrecker to the disabled vehicle and, if possible, perform on-site repairs. The wrecker will be equipped with a limited inventory of parts to perform simple on-site repairs. For more complex repairs, the disabled vehicle will be towed to the shop.

The main purpose of the paint and body function is to repair collision damage. The body and paint workload is more cyclical than the maintenance and repair workload; as a result, the body specialists and the painters will be cross-trained. Additional efficiencies will be accomplished by using the automated maintenance and repair system to schedule repairs in a way that reduces the amount of nonproductive time for body repairers and mechanics.

Two mechanics will be qualified to perform PM, scheduled and unscheduled maintenance on the three bridge cranes. All of this work will be performed on-site. The mechanics will take to the site an inventory of crane parts based on historical maintenance and repair data.

One of the problems identified in conducting scheduled maintenance on vehicles was getting the drivers to bring their vehicles in for maintenance. Extending the hours of operation of the shop by staggering the arrival and departure times of the mechanics will provide an incentive to the customers to bring vehicles to the maintenance shop for scheduled maintenance.

MEO Staffing and Organization

Based on the analysis of workload, the assumption that workload will not change, and the use of widely accepted commercial staffing standards, the division can perform its work well with 25.5 FTEs vs. the current 36.5 FTEs. Exhibit 7-9 compares the two staffing levels, distributed by position.

Exhibit 7-9
Comparison of Staffing Levels

POSITION TITLE	GRADE	AUTHORIZED FTE'S	ASSIGNED FTE'S	PROPOSED FTE'S
Transportation Director	WS-14	0.5	0.5	0.5
Secretary	GS-5	1	1	1
Head Administration Branch	GS-11	1	1	0
Records Clerk	GS-5	1	1	1
PM Scheduler	GS-7	1	1	1
Service Writer	GS-9	1	1	1
Service Writer	GS-7	1	1	1
Head Maintenance. Branch	WS-13	1	1	1
Parts Expediter	WG-9	1	1	0
Inventory/Supply Spec.	WG-7	0	0	1
Mechanic	WG-10	11	10	4
Mechanic	WG-9	6	5	3
Mechanic	WG-7	3	3	4
Mechanic	WG-5	1	1	3
Head Body & Paint Branch	WS-12	1	1	0
Body Specialists	WG-9	5	4	3
Painter	WG-9	1	1	1
TOTAL		36.5	33.5	25.5

The number of mechanics can be reduced to 14 from the current 21 by applying industry staffing standards (2.4 hours per 1,000 miles per vehicle), productivity analysis, and work sampling methodology. This staffing also allows for the special, more labor-intensive needs of other vehicles and equipment maintained, such as the fire trucks and bridge cranes, as well as the need to allow for absences due to leave and training. Similarly, the projected body and paint workload warrants four FTEs versus seven positions.

To address supply concerns, the current parts expediter job will be reclassified as an inventory/supply specialist. With better automation of the inventory function and training, this individual will be better equipped to obtain parts and material and promote efficient management of these inputs.

As a result of increased operational efficiencies, the MEO will consolidate three branches (Administration, Maintenance, and Body and Paint) into one branch—the Maintenance Branch. As part of this consolidation, the head of the Administrative Branch position will become part of the Maintenance Branch, eliminating the Administrative Branch head slot. The Maintenance Branch head (WS-13), in addition to his responsibilities for day-to-day operations of the branch, will also work on the line.

With these changes, there is no need to modify the responsibilities of the director (WS-14) and secretary (GS-5) positions. The transportation director is also responsible for the administration of the Transportation Operations Branch and, therefore, is responsible for all of the interfaces within the command of the maintenance and operations functions.

Training

In creating a smaller, more efficient organization, some positions assume additional functions and require training or cross-training. Such training will include inventory management training, training on the new computer system, training for ASE certification, and cross-training between body work and painting. Additionally, service providers will be trained in the new quality control process.

Training for specific positions includes the following:

- The mechanics will be trained to use the new compressor system and diagnostic tool being acquired.
- The inventory/supply specialist skills will be upgraded, and training will be provided on a new inventory management system being purchased.
- The WG-5 positions will be trained in proper towing procedures.

Equipment and Facilities

The activity will acquire an automated maintenance system with several components, including a job scheduling tool (with a look-up for standard performance times, e.g., Chilton's), an inventory system, a preventive maintenance log and scheduler for each vehicle and a vehicle repair history.

The activity will also acquire a modern diagnostic system for major vehicle systems.

To ease the physical problems and productivity loss caused by the current compressor carts, a central system will be installed. It will deliver compressed air to each workstation, either from the floor or from overhead pipes.

To enhance mechanic productivity and reduce tool losses, roll-away tool cabinets will be purchased. One cabinet with tool set will be assigned to each mechanic. This practice promotes accountability and convenience.

MANAGEMENT APPROACH

The MEO will implement a quality control process to ensure that the work performed by the MEO meets all of the requirements specified in the PWS. The basic approach involves several steps:

- Each mechanic, body specialist, and painter will be certified to perform certain Maintenance and repair operations. Each of the positions will earn ASE certification.
- Each mechanic or team (depending on how the work is assigned) will take ownership for the repairs required for each vehicle. Consequently, while the repairs for each vehicle are being performed, the mechanic or team will certify that the repairs are being completed correctly. This process is similar to the artisan certification process used elsewhere in the Navy.

By using industry standards, the MEO's quality control process will focus on meeting the performance standards stated in the PWS, rather than focusing on product inspections. The QAE's quality assurance function will be to evaluate the process in place in the division by spot checking the services provided.

PAST EXPERIENCE/STATEMENT OF QUALIFICATIONS

The maintenance and repair organization at NSA Cattle Crossing, Utah has performed maintenance and repair on the activity's vehicles for 60 years. The organization in the past has been constrained by outdated and inefficient policies and practices. The mechanics and body repair specialists have the requisite expertise to perform the individual tasks. By adopting industry standards and techniques, for example, the automated maintenance and repair system, and a customer satisfaction measure, the MEO will be able perform more efficiently and at lower cost to the NSA than in the past.

SAMPLE TRANSITION PLAN

INTRODUCTION

If the government wins this solicitation, a transition team must begin immediately to implement the MEO. However, reductions in force take place 60 days after the issuance of the RIF notice. The implementation of staffing changes should be done expeditiously because employee morale and productivity will certainly be affected by the RIF action.

To expedite the transition process, a transition team will be created by the Commanding Officer and tasked with implementing the MEO while simultaneously mitigating customer impact.

The CA team leader will become the transition team leader, the head of the Maintenance Branch will provide functional expertise, and the CA team Management Analyst will provide personnel and transition expertise.

Assumption: The individuals subject to RIF have been in the same series and grade for maintenance for their entire career with NSA. We have assumed for the purposes of the simulation that the RIF will apply only to the 36.5 authorized positions in the Transportation Division.

SUMMARY OF PROCESS CHANGES

A number of changes in processes and procedures permit a reduction in staff.

The organization will acquire a computerized maintenance system that will facilitate tracking fleet maintenance and repair. The division will have its own inventory that is tracked by the computer system. The branch will have a second computer system that is connected to the Navy Supply System computer network so that the branch can check the Navy Supply System for parts not in the shop inventory.

The branch layout will be reconfigured to improve efficiency. A central air compressor system will replace the individual air compressor carts. Roll-away tool kits will replace the central tool crib to improve mechanics' access to tools, to increase tool accountability, and to prevent having to continually replace tools. Finally, the branch will acquire modern diagnostic equipment.

SUMMARY OF STAFFING CHANGES

The branch is reorganizing to reflect the most efficient organization. Staffing changes will be accomplished through process improvement, automation, and training. The administrative and paint and body functions have been consolidated in the Maintenance Branch. The number of mechanics has been reduced from 19 to 14 by applying industry staffing standards (2.4 hours per 1,000 miles per vehicle), work sampling, and productivity analysis.

The consolidation of the Administrative and Paint and Body Branches eliminates the need for supervisory slots for those functions. Two of the WG-10 position descriptions have been changed to make them working leaders. The WG 9/10 mechanics will complete more complex tasks and provide on-the-job training to WG-5/7 mechanics, who will complete the less complex work. The parts expediter has been reclassified as an inventory/supply specialist. The body specialists and painter will be cross trained. All Position Descriptions (PD) need to be updated to match new tasks assigned in the MEO staffing.

The current and proposed organizational staffing is displayed in Exhibit 7-10.

Exhibit 7-10
Current and Proposed Staffing Organization

POSITION TITLE	GRADE	AUTHORIZED FTES	ASSIGNED FTES	PROPOSED FTES
Transportation Director	WS-14	0.5	0.5	0.5
Secretary	GS-5	1	1	1
Head Administration Branch	GS-11	1	1	0
Records Clerk	GS-5	1	1	1
PM Scheduler	GS-7	1	1	1
Service Writer	GS-9	1	1	1
Service Writer	GS-7	1	1	1
Head Maintenance. Branch	WS-13	1	1	1
Parts Expediter	WG-9	1	1	0
Inventory/Supply Spec.	WG-7	0	0	1
Mechanic	WG-10	11	10	4
Mechanic	WG-9	6	5	3
Mechanic	WG-7	3	3	4
Mechanic	WG-5	1	1	3
Head Body & Paint Branch	WS-12	1	1	0
Body Specialists	WG-9	5	4	3
Painter	WG-9	1	1	1
TOTAL		36.5	33.5	25.5

Staff will be trained on the software purchased for the administrative functions, as well as on the new air compressor and the diagnostic equipment. Staff will be cross-trained to perform several functions. For instance, the service writers and inventory specialist will receive training to improve their skill levels. The WG-5 mechanics will receive training in towing. Additionally, all junior mechanics will receive on-the-job training from senior mechanics.

PLANNING FOR IMPLEMENTING THE MOST EFFICIENT ORGANIZATION

Implementation of the MEO begins no later than notification of the award decision. Preliminary planning for the transition may begin when the IRO's review is complete. During the time between the completion of the Management Plan and the announcement of award, the transition team is primarily planning the efforts associated with equipment purchases, personnel actions, and training. During the planning phase, actual acquisition of new equipment will begin, but contracts will not be signed until after the award decision is made. During the same planning period, training opportunities should be identified and training contract acquisition may begin, but awards should not be made until an award decision for the CA study is finally made.

During the planning period, the transition team may review the command strategy for any required changes, define the boundaries for the RIF and identify any special exemptions, obtain RIF authority, notify unions and employees of RIF authority, conduct Mock RIFs, and assess results of the mock RIF to determine "early-out" opportunities.

POST-AWARD DECISION ACTIVITIES

At award decision, the transition team will execute one of two plans, either implementing the government's MEO or assisting in implementing the winning contractor's proposal.

Government Wins

When the decision has been announced and the government's proposal has won, the transition team will assist the HRO in RIF execution. Between the time of RIF issuance and the actual RIF, the transition team will establish a Personnel Transition Center to allow employees to access the Priority Placement List (Stopper List), provide affected employees with HRO assistance with resumes, and establish a job center for local market availability.

Contractor Wins

When the decision has been announced and the contractor's proposal has won, the transition team will assist the HRO in RIF execution. Between the time of RIF issuance and the actual RIF, the transition team will establish a Personnel Transition Center to allow employees to access the Priority Placement List (Stopper List), provide affected employees with HRO assistance with resumes, and establish a job center for local market availability. In addition, the transition team will assist the affected employees and the contractor regarding the right of first refusal and any placement opportunities with the contractor.

The transition team will work closely with the contractor to establish operating procedures for conducting business during this transition period before the contractor is fully operational. Assistance by the transition team will include transfer of equipment and inventory as well as determining workload and scheduling. The transition team

should ensure that all performance standards and productivity are maintained throughout the transition phase.

The transition team will also coordinate the disposition of any government material or equipment not used by winning contractor.

INDICATORS OF SUCCESSFUL TRANSITION TO THE MEO

Should the government win the bid, the following performance indicators will serve as measures of how well the organization transitioned from the current state to the MEO.

1. Has the MEO been implemented on schedule?
2. Was press coverage of the transition process fair and accurate?
3. Was disruption of the workplace kept to a minimum?
4. Is the MEO at or below the IHCE?
5. Customer Feedback: Has the baseline survey been conducted? Has customer satisfaction been maintained or improved?
6. Is vehicle availability at 82.5 percent or higher?
7. Is vehicle condition at an acceptable level?
8. Has the Management Plan been fully complied with?

Exhibit 7-11
COST COMPARISON FORM
IN-HOUSE VS. CONTRACT OR ISSA PERFORMANCE

	Performance Periods					
	1ST	**2ND**	**3RD**	**4TH**	**5TH**	**TOTAL**
IN-HOUSE PERFORMANCE						
1. Personnel	1,067,842*	1,121,234	1,177,296	1,236,161	1,297,969	5,900,501
2. Material and Supply	5,347					5,347
3. Other Specifically Attributable	240,600	18,724	19,116	19,528	19,961	317,929
4. Overhead	128,141	134,548	141,275	148,339	155,756	708,060
5. Additional						
6. Total In-House Cost	1,441,930	1,274,506	1,337,687	1,404,028	1,473,686	6,931,837
CONTRACT OR ISSA PERFORMANCE						
7. Contract/ISSA Price						
8. Contract Administration						
9. Additional						
10. One Time Conversion						
11. Gain on Assets	( )	( )	( )	( )		( )
12. Federal Income Taxes	( )	( )	( )	( )		( )
13. Total Contract or ISSA	_____	_____	_____	_____		_____
DECISION						
14. Minimum Conversion Differential						
15. Adjusted Cost of In-House Performance						_____
16. Adjusted Total Cost of Contract or ISSA Performance						_____
17. Decision - Line 16 minus Line 15						_____
18. Cost Comparison Decision: Accomplish Work:						_____
In-House						_____
Contract or ISSA						_____

* all numbers are U.S. dollars

NOTE: For this example, personnel numbers have been inflated by 5 percent in the second to fourth years. Overhead costs have been calculated at 12 percent of personnel costs.

Line 1 (Cost Comparison Form) Personnel Costs

The following two exhibits represent the current assigned and the MEO staffing plans.

Exhibit 7-12
Current Staffing Plan

A	B	C	D	E	F	G	H	I
Position Title	**Grade**	**FTEs****	**Annual Wage (C * Wage Rate)**	**Other Entitle-ments**	**Basic Pay (D+E)**	**Fringe Benefits*** (F*32.45%)**	**Other Pay**	**Personnel Costs (F + G + H)**
Director	WS-14	0.5	$24,825		$24,825	$8,056		$32,880
Secretary	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Head Admin Branch	GS-11	1.0	$41,282		$41,282	$13,396		$54,678
Records Clerk	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Scheduler	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Service Writer	GS-9	1.0	$34,121		$34,121	$11,072		$45,193
Service Writer	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Head Maint. Branch	WS-13	1.0	$47,486		$47,486	$15,409	$200	$63,096
Parts Expediter	WG-9	1.0	$31,762		$31,762	$10,307	$200	$42,268
Mechanic	WG-10	10.0	$329,056		$329,056	$106,779	$1,070	$436,905
Mechanic	WG-9	5.0	$158,808		$158,808	$51,533	$2,109	$212,450
Mechanic	WG-7	3.0	$88,171		$88,171	$28,612	$600	$117,383
Mechanic	WG-5	1.0	$26,936		$26,936	$8,741	$600	$36,277
Head Body & Pain Branch	WS-12	1.0	$45,573		$45,573	$14,788	$200	$60,561
Body Specialist	WG-9	4.0	$127,046		$127,046	$41,227	$800	$169,073
Painter	WG-9	1.0	$31,762	$5,000	$36,762	$11,929	$200	$48,891
TOTALS		33.5	$1,087,648	$5,000	$1,092,648	$354,564	$5,979	$1,453,191

** or hours for intermittent employees
*** or 7.65% for intermittent employees

Exhibit 7-13
MEO Staffing Plan

A	B	C	D	E	F	G	H	I
Position Title	Grade	FTEs**	Annual Wage (C * Wage Rate)	Other Entitle-ments	Basic Pay (D+E)	Fringe Benefits*** (F*32.45%)	Other Pay	Personnel Costs (F + G + H)
Director	WS-14	0.5	$24,825		$24,825	$8,056		$32,880
Secretary	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Records Clerk	GS-5	1.0	$22,518		$22,518	$7,307		$29,825
Scheduler	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Service Writer	GS-9	1.0	$34,121		$34,121	$11,072		$45,193
Service Writer	GS-7	1.0	$27,892		$27,892	$9,051		$36,943
Head Maint. Branch	WS-13	1.0	$47,486		$47,486	$15,409	$200	$63,096
Inventory/Supply Specialist	WG-7	1.0	$29,390		$29,390	$9,537	$200	$39,128
Mechanic	WL-10	2.0	$72,426		$72,426	$23,502	$400	$96,328
Mechanic	WG-10	2.0	$65,811		$65,811	$21,356	$1,070	$88,237
Mechanic	WG-9	3.0	$95,285		$95,285	$30,920	$400	$126,605
Mechanic	WG-7	4.0	$117,562		$117,562	$38,149	$1,813	$157,523
Mechanic	WG-5	3.0	$80,808		$80,808	$26,222	$2,790	$109,820
Body Specialist	WG-9	3.0	$95,285		$95,285	$30,920	$400	$126,605
Painter	WG-9	1.0	$31,762	$5000	$36,762	$11,929	$200	$48,891
TOTALS		25.5	$795,580	$5,000	$800,580	$259,788	$7,473	$1,067,842

** or hours for intermittent employees
*** or 7.65% for intermittent employees
NOTE: Overtime hours have been distributed to the WG-7 and WG-5 employees to reduce the costs associated with having a WG-9 or 10 employee towing vehicles into the shop. The other pay category also includes an allowance for clothing and safety equipment.

Line 2 (Cost Comparison Form):

Exhibit 7-14
Material and Supply Costs

NOMENCLATURE	ID #	QUANTITY REQUIRED	UNIT PRICE	INFLATION FACTOR	SOURCE OF SUPPLY	MATERIAL MARKUP FACTOR	ADJUSTED UNIT PRICE (D*E*G)	ANNUAL MATERIAL COST (C*H)
Special Paint	Bldg 16	1	$4,278		GSA	25%	$5,347	$5,347
Total		1	$4,278			25%	$5,347	$5,347

** According to the A-76 *Supplemental Handbook*, no material mark up is required if the Navy certifies that all costs of ac storing, transporting and overhead are included in the pricing structure. For the purposes of this illustration, a material m been included in order to provide an example of a circumstance where the Navy would not furnish a particular material it need to be determined.

There is some special paint that will not be provided to the contractor because it can be utilized elsewhere by the Naval Support Activity.

Line 3 (Cost Comparison Form): Other Specifically Attributable Costs

Other specifically attributable costs will be used to document any costs other than personnel and materiel costs that are specifically attributable to a function.

Exhibit 7-15
Other Specifically Attributable Costs

Category	First	Second	Third	Fourth	Fifth	Total
Depreciation						
Rent						
Maintenance & Repair						
Utilities						
Insurance (Casualty .005*Net Book Value)	$875	$875	$875	$875	$875	$4,375
Liability Insurance	$7,475	$7,849	$8,241	$8,653	$9,086	$41,304
Other Costs:						
Upgrading Admin Branch Software& Hardware	$35,000					$35,000
Centralized compressed air upgrade	$49,950					$49,950
Diagnostic Equipment	$12,300					$12,300
Rollaway cabinets with tools	$7,500					$7,500
Training	$127,500	$10,000	$10,000	$10,000	$10,000	$167,500
TOTAL	$240,600	$18,724	$19,116	$19,528	$19,961	$317,929

NOTE: Liability insurance is estimated based on personnel costs in accordance with the A-76 *Supplemental Handbook* (.007 of personnel costs). All equipment costs are incurred in the first year of performance. Training costs are high in the first year as cross-training is conducted and all personnel are trained in new MEO operations. Casualty insurance is based on estimated book value of equipment at $175,000.

Line 4 (Cost Comparison Form): Overhead

Overhead costs include two major categories of costs: operations overhead and general and administrative overhead. Operations overhead is defined as those costs that are not 100 percent attributable to the function under study, but are costs generally associated with the recurring management of the activity. The general and administrative overhead costs include items such as salaries, equipment, and facilities associated with headquarters management, accounting, data processing and other support services provided in support of this activity. Line 4 is calculated by multiplying the Line 1 personnel costs by 12 percent. If the personnel costs include the cost of military personnel, the overhead cost should be 12 percent of the civilian personnel costs only.

Overhead: 12 percent of Total Personnel Costs

Period of Performance

Exhibit 7-16
Overhead

YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5	TOTAL
$128,141	$134,548	$141,275	$148,339	$155,756	$708,060

Line 5 (Cost Comparison Form): Additional Costs

This line is used to identify any costs not specifically attributed to Lines 1-4 of the In-House Cost Estimate.

APPENDIX

Note: The following information was provided by the Outsourcing Support Office for the purposes of the simulation of an A-76 cost comparison. The support contractors utilized this simulated data to prepare all of the examples developed for this Guide.

Description of the Simulation Scenario

Transportation Maintenance and Repair Branch
Naval Support Activity, Cattle Crossing, Utah
Civilian Staff: 37 authorized positions, 34 assigned

Description: The transportation maintenance and repair function provides full service automotive and light truck repair for 1,424 vehicles (Exhibit 7-17) owned by Naval Support Activity, plus 3 bridge cranes installed in the industrial area. Also, NSA provides reimbursable repair services for several small commands and the Navy recruiters within a 125-mile radius. Services include routine maintenance, scheduled repairs, and breakdown maintenance on all assigned vehicles. Road service is provided for all NSA assigned vehicles when problems occur within a 100-mile radius. Services also include full service body repair and painting, primarily for accident repair, which is reimbursable by the using department. The Transportation Department also installs radios in all sedans and does custom fitting of police vehicles with lights, sirens, radios, and other special equipment.

Exhibit 7-17
Vehicle Inventory

TYPE	INVENTORY	AVERAGE AGE	AVERAGE MILEAGE/YEAR
sedan	91	7.2	4,750
sedan/police	105	3.1	21,000
1/2 T p/u	644	8.6	6,100
3/4 T p/u *	329	9.1	6,300
3/4 T p/u 4X4*	40	6.2	9,350
2 T stake	176	13.1	4,500
1500g tanker	21	11.8	7,500
wrecker	12	4.9	14,000
fire truck	6	15.0	2,100
Total	**1,424**		

* All 3/4 T p/u vehicles can be equipped for snow removal
Availability: Average availability of all vehicles is 82.5 percent.

NSA is programmed to receive the following new vehicles in the next 3 years (Exhibit 7-18).

Exhibit 7-18
Vehicle Replacements

TYPE	FY98	FY99	FY00
sedan	none	1	none
sedan/police	4	2	none
1/2 T p/u	5	2	3
2 T stake	3	none	2

Exhibit 7-19 illustrates the rate of accident repair from 1994 to 1995.

Exhibit 7-19
Accident Repairs

YEAR	NSA	OTHER	TOTAL
94	126	42	168
95	142	47	189
96	114	38	152

Supply Support

The NSA Supply Department maintains a stock of automotive components, batteries, and tires to support the transportation function. All components required and not in stock are purchased through the Navy Supply System. No support contracts for parts or services are currently in place.

Exhibit 7-20 illustrates component use in dollars.

Exhibit 7-20
Component Use in Dollars

FY	ROUTINE	ACCIDENT	SPECIAL PURCHASES
94	$1,278,000	$444,000	$260,046
95	$1,344,738	$370,734	$149,736
96	$1,594,692	$346,626	$239,406

The Supply Department employs 12 people and supports and more than $1,000,000 annual purchasing and contract volume.

Equipment and Facilities

The NSA transportation function staff works in a converted 1940's vintage warehouse that has been partitioned to provide 12 work bays, a parts area, a battery shop, a tire mounting area, and an office complex including a customer lounge and driver ready room. The shops are equipped with hydraulic lifts, compressed air, and overhead lube services (in three bays). There is a paint booth that is being examined by the county air pollution control district for compliance.

Current Organization

The current organization of the Transportation Maintenance and Repair Division is illustrated in Exhibit 7-21.

Exhibit 7-21
Organization Chart